IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Bader *et al.*

SERIAL NUMBER: 09/755,398   EXAMINER: S. Hashemi

FILING DATE: January 4, 2001   ART UNIT: 1637

FOR: METHOD OF ANALYZING A NUCLEIC ACID

Assistant Commissioner for Patents
Washington, D.C. 20231

RESPONSE TO JUNE 19, 2002 OFFICE ACTION

In response to the Office Action mailed June 19, 2002 ("Office Action"), please amend the application as follows.

In the claims:

Amend the claims as follows:

1.   (Amended) A method for identifying, classifying or quantifying one or more nucleic acids in a sample comprising a plurality of nucleic acids having different nucleotide sequences without sequencing, the method comprising:

(a) probing said sample with one or more recognition means wherein each recognition means recognizes a different target nucleotide subsequence or a different set of target nucleotide subsequences to provide one or more targeted nucleic acids;

(b) generating one or more first signals from said sample probed by said recognition means, each generated first signal arising from a targeted nucleic acid in said sample and comprising a representation of (*i*) the length between occurrences of target subsequences in said targeted nucleic acid, and (*ii*) the identities of said target subsequences in said targeted nucleic acid or identities of said target subsequences among which are included the target subsequences in said targeted nucleic acid;

(c) selecting one or more targeted nucleic acids based on their corresponding first signals;

(d) extending sequence information from one or more target subsequences in said selected targeted nucleic acid by one or more nucleotides providing one or more extended